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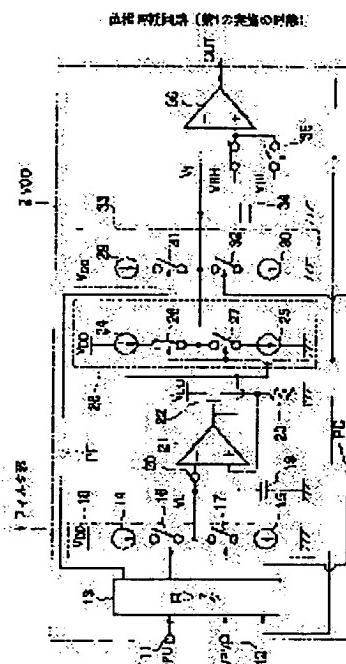
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## (54) PHASE SYNCHRONIZATION CIRCUIT

## (57)Abstract:

PROBLEM TO BE SOLVED: To provide a phase synchronization circuit complying with a low power supply voltage and a high-speed processing that surely conducts phase locking when being employed for a PLL circuit.

SOLUTION: A logic circuit 13 of a filter section 1 generates a phase forward signal PF and a phase delay signal PD from a lead signal/FU, a lag signal/PV and an output signal OUT of a VCO 2. A charge pump 28 of the VCO 2 supplies/extracts a current in response to an output voltage VL of the filter section 1 to/from a capacitor 34. Furthermore, the charge pump 33 supplies/extracts a current in response to the phase forward signal PF and the phase delay signal PD to/from the capacitor 34. The capacitor 34 is connected to a comparator 36, which is oscillated at a frequency correspondent to a voltage Vf across the capacitor 34.



## LEGAL STATUS

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